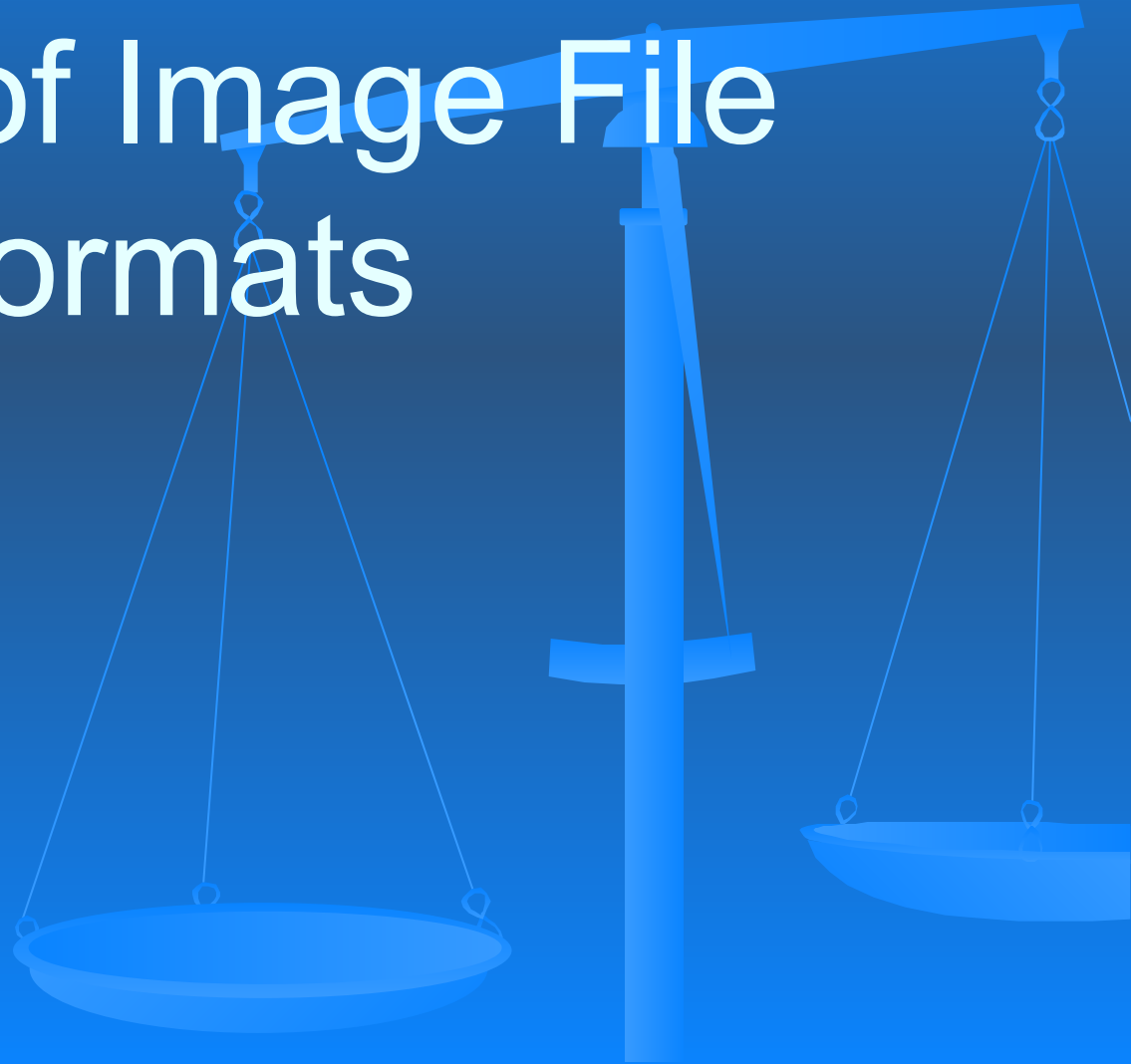


Types of Image File Formats

Multimedia

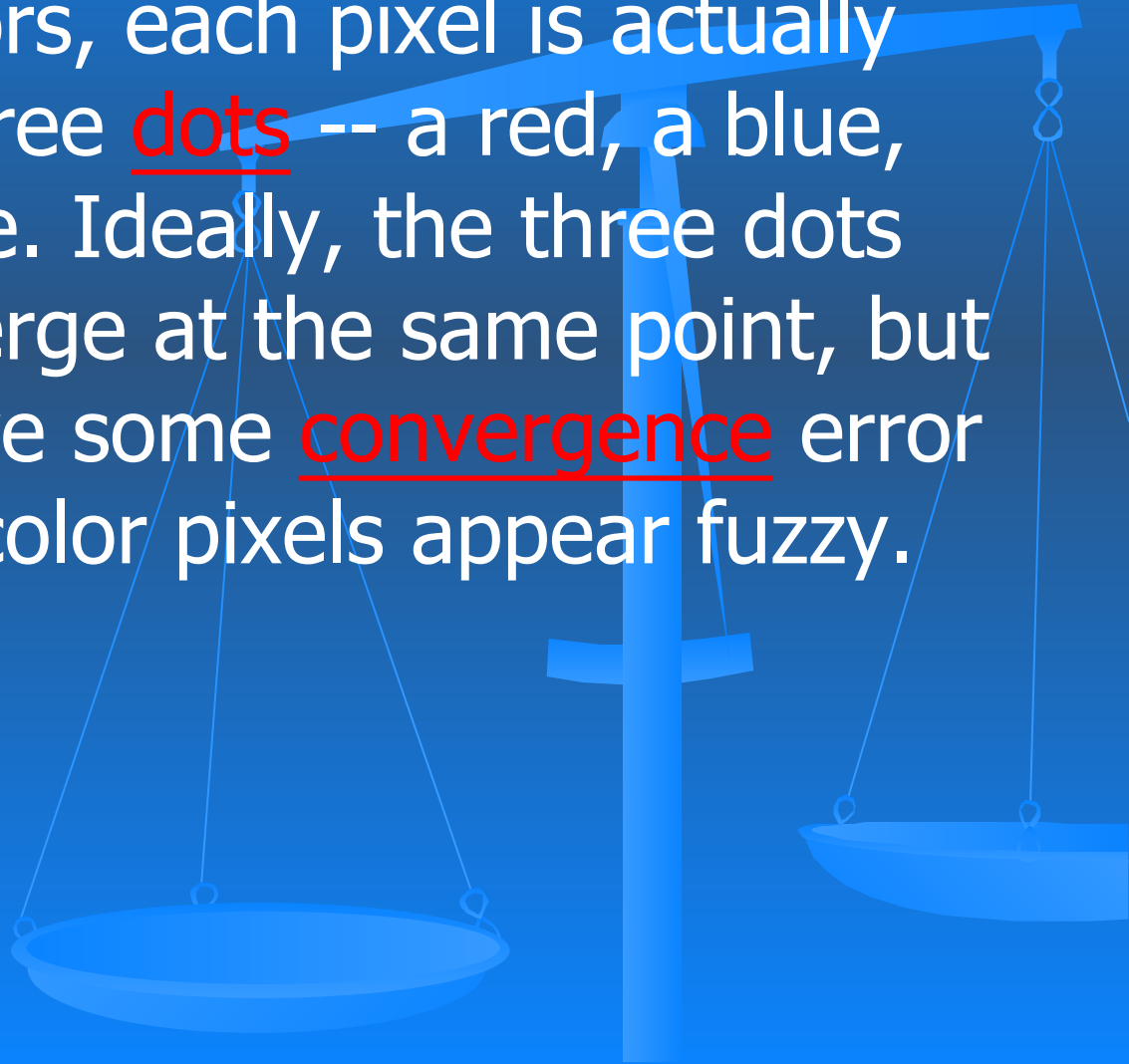


Pixels and Resolution

- Short for ***P**icture **E**lement*, a pixel is a single point in a graphic image. Graphics monitors display pictures by dividing the display screen into thousands (or millions) of pixels, arranged in rows and columns. The pixels are so close together that they appear connected.
- The number of bits used to represent each pixel determines how many colors or shades of gray can be displayed. For example, in 8-bit color mode, the color monitor uses 8 bits for each pixel, making it possible to display 2 to the 8th power (256) different colors or shades of gray.

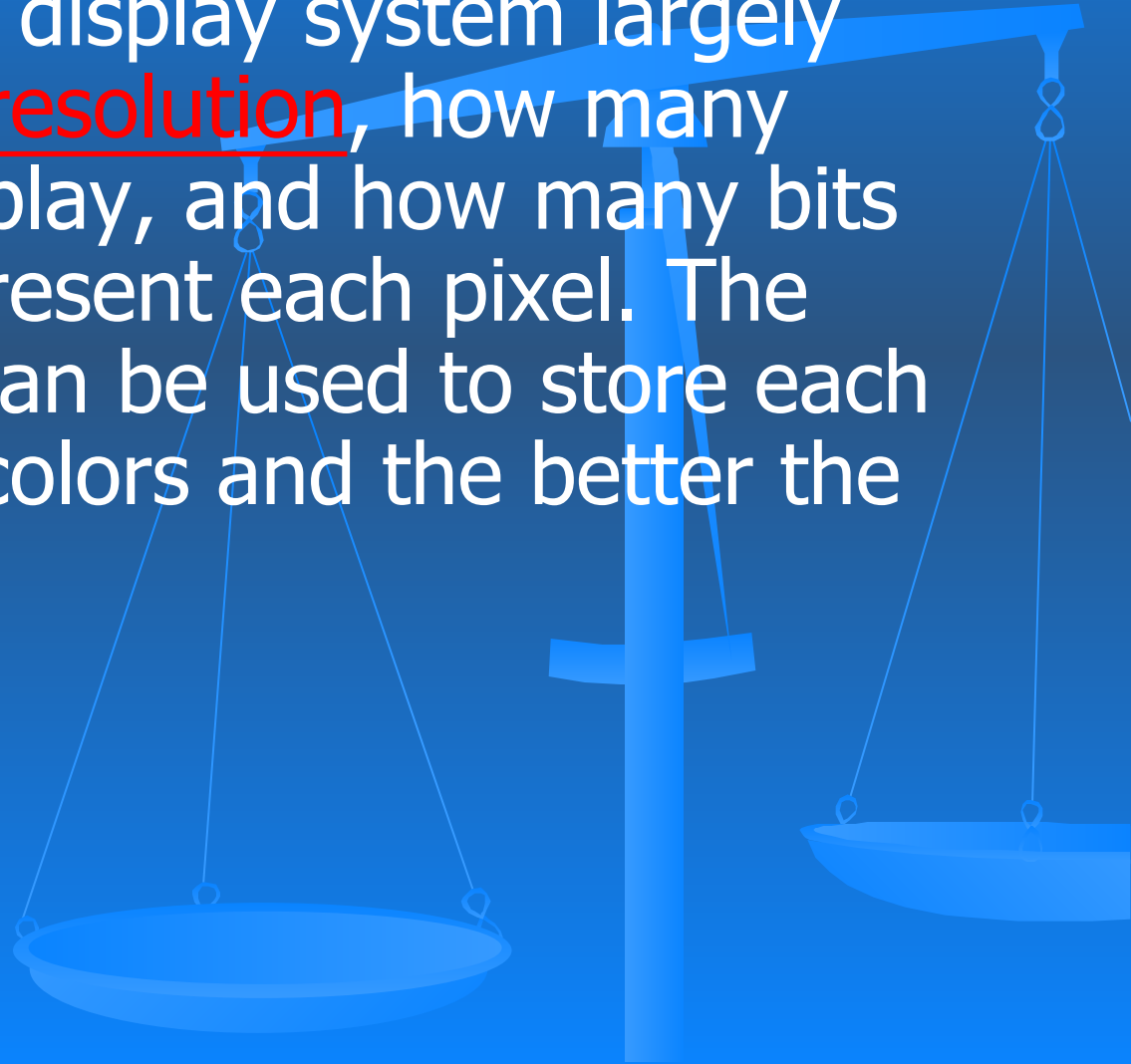
Pixels (cont.)

- On color monitors, each pixel is actually composed of three dots -- a red, a blue, and a green one. Ideally, the three dots should all converge at the same point, but all monitors have some convergence error that can make color pixels appear fuzzy.



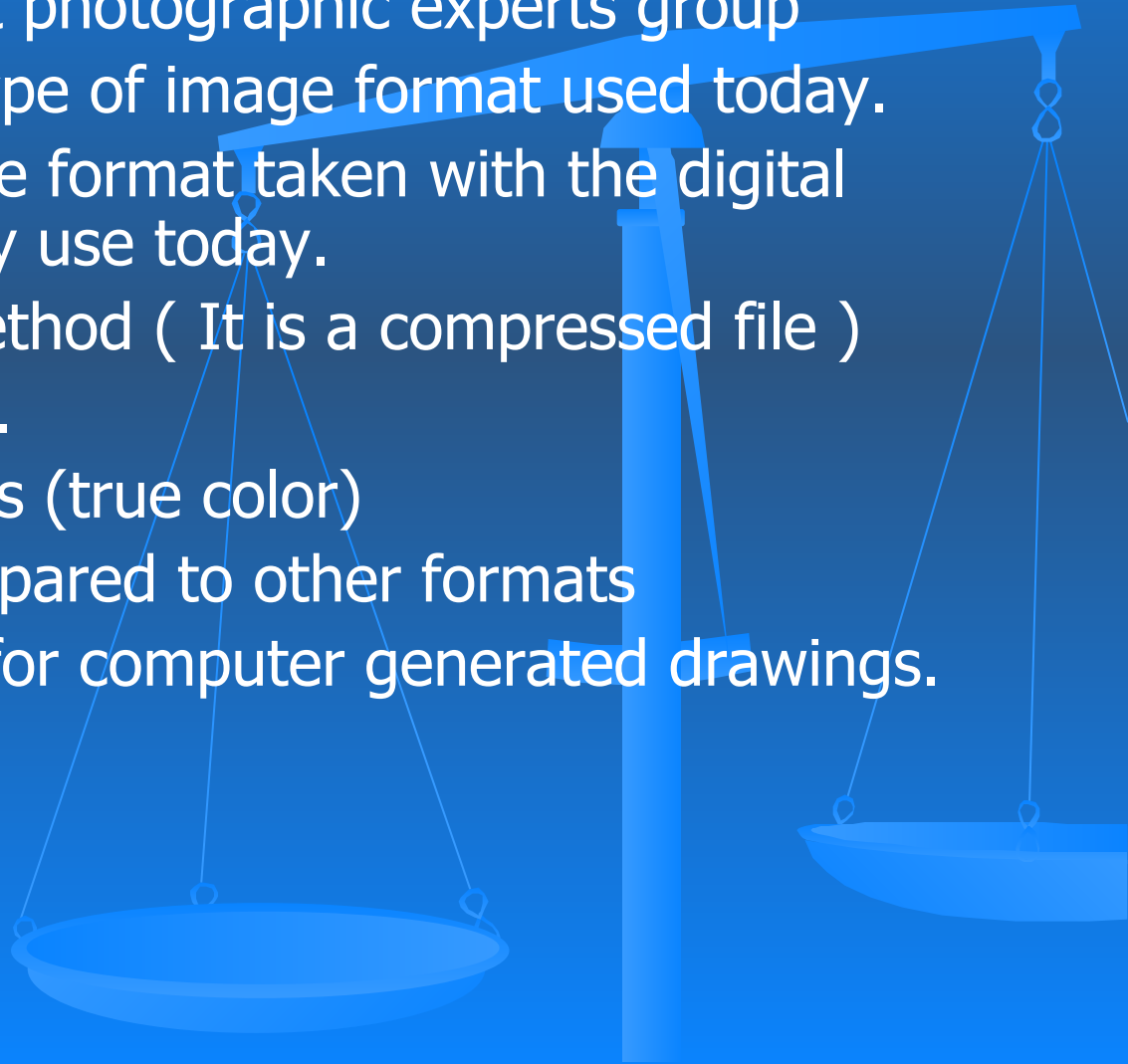
Pixels (cont.)

- The quality of a display system largely depends on its resolution, how many pixels it can display, and how many bits are used to represent each pixel. The more bits that can be used to store each pixel the more colors and the better the resolution.



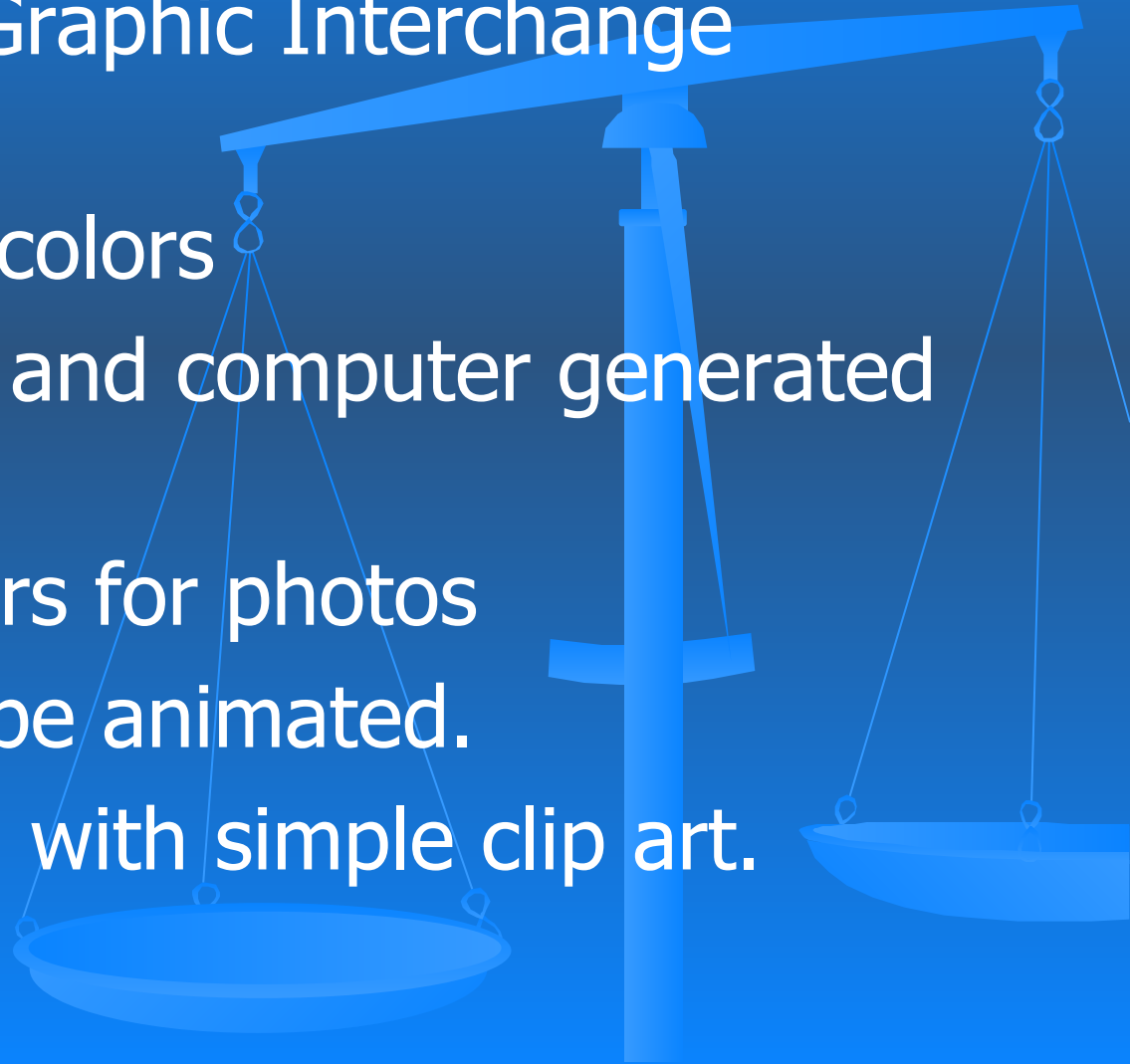
JPEG

- Jpeg stands for “joint photographic experts group”
- The most common type of image format used today.
- It is the type of image format taken with the digital camera we commonly use today.
- 10:1 compression method (It is a compressed file)
- Best for Photographs.
- Uses millions of colors (true color)
- Smaller Filesizes compared to other formats
- Not commonly used for computer generated drawings.



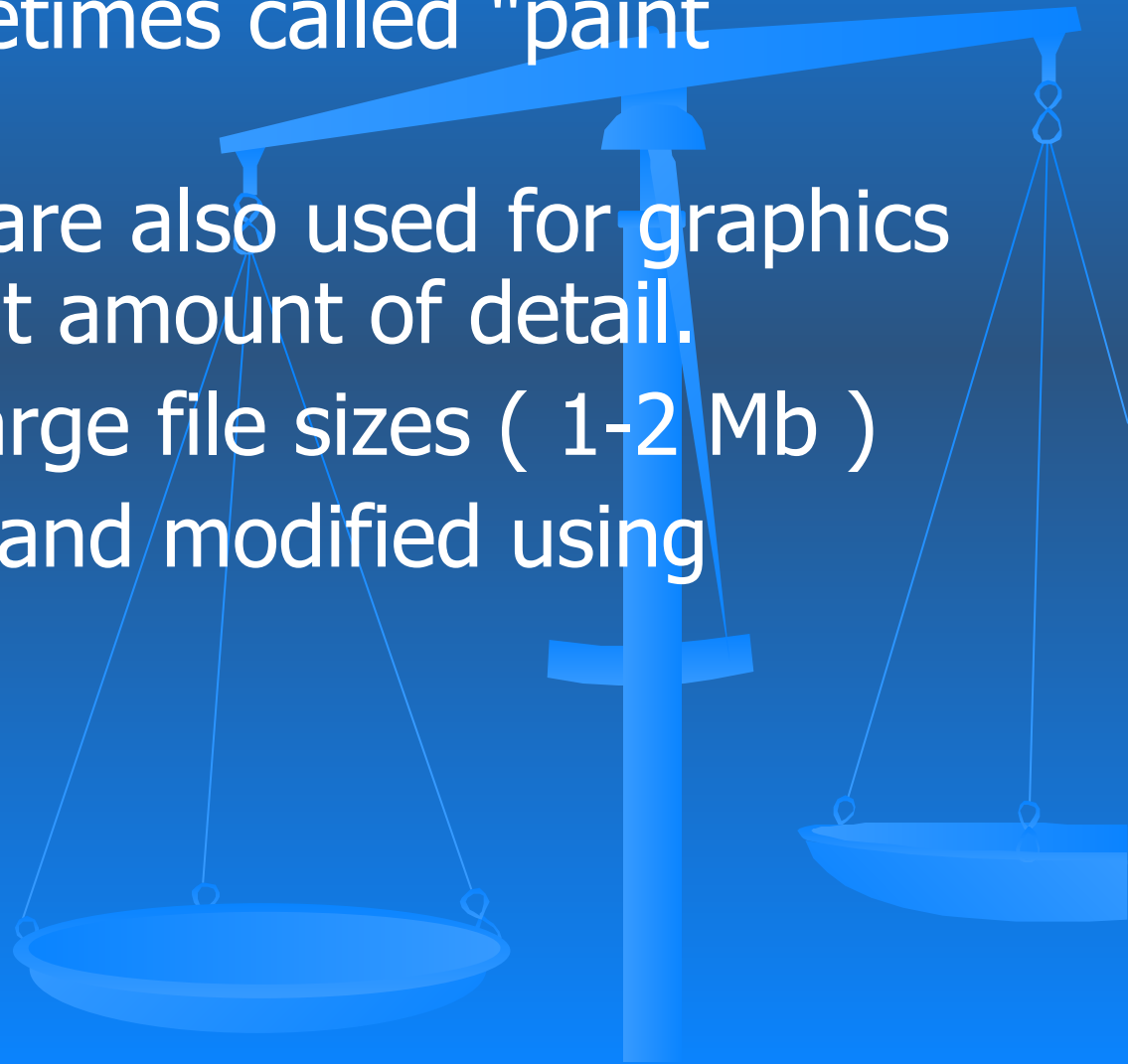
Gif

- Gif stands for “Graphic Interchange Format”
- Uses up to 256 colors
- Best for line art and computer generated drawings
- Insufficient colors for photos
- Gif images can be animated.
- Commonly used with simple clip art.



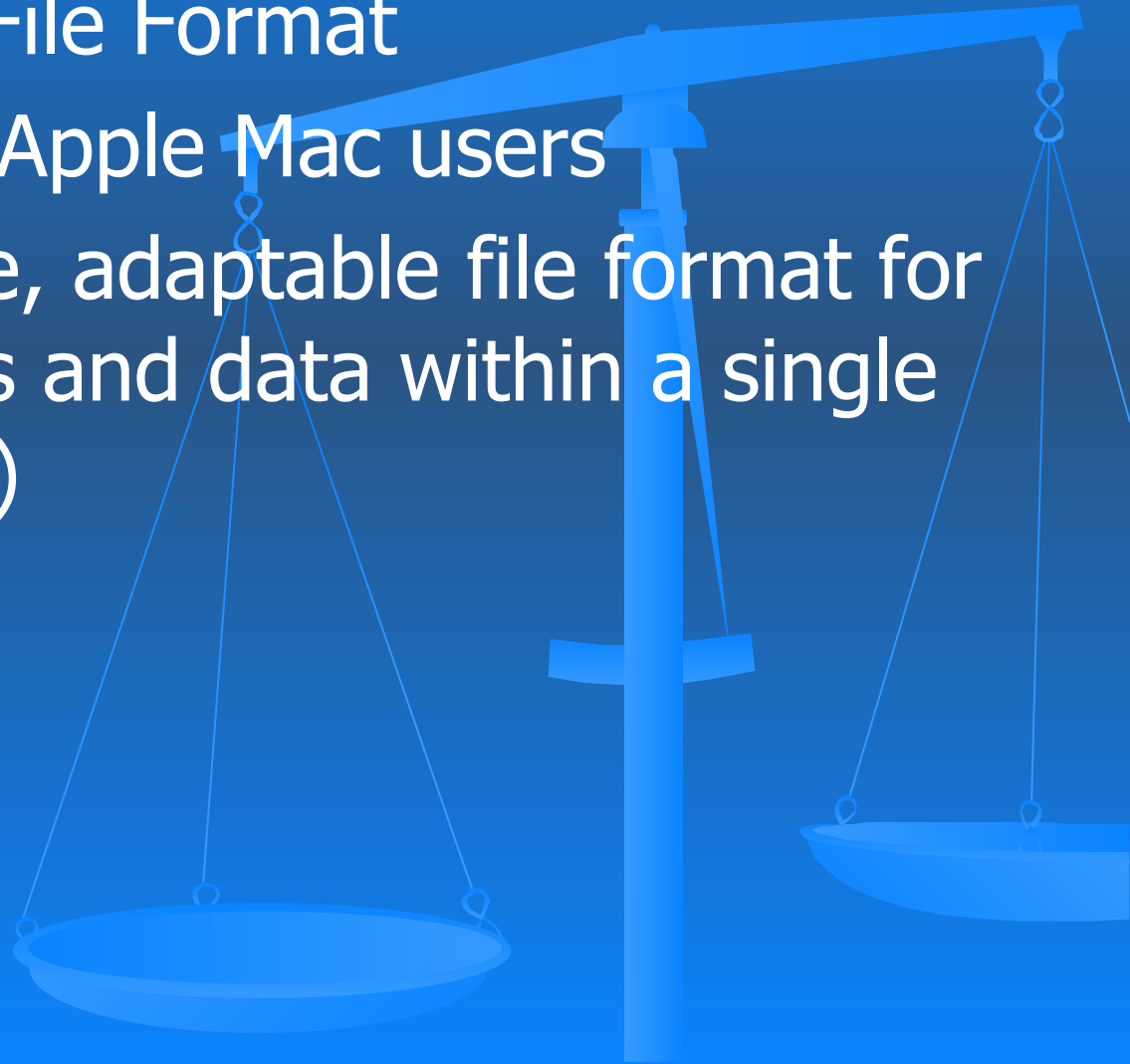
Bitmap

- **Bitmaps:** Sometimes called "paint graphics"
- Bitmap images are also used for graphics requiring a great amount of detail.
- They produce large file sizes (1-2 Mb)
- Can be opened and modified using Microsoft Paint



Tiff

- Tagged Image File Format
- Popular among Apple Mac users
- TIFF is a flexible, adaptable file format for handling images and data within a single file (Wikipedia)



Changing Formats

- Most image editing applications (ex: Adobe Photoshop) can open many types of image formats
- It can also create many different types of image file formats (save as - type)

